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Animal Science Newsletter

Animal Science

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Spring 2019

## **ANSC, Spring 2019**

University of Arkansas, Fayetteville. Department of Animal Sciences

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# ANSC

{animal science}

Spring / Summer 2019



## Animal Science Faculty

Name/Specialty	Phone/Email
Looper, Michael Department Head	479-575-3745 looper@uark.edu
Apple, Jason Meat Science	479-575-4840 japple@uark.edu
Coffey, Ken Ruminant Nutrition	479-575-2112 kcoffey@uark.edu
Gadberry, Shane Beef Nutrition	501-671-2169 sgadberry@uaex.edu
Huang, Yan Muscle Biology	479-575-6397 yxh010@uark.edu
Jennings, John Forage System	501-671-2350 jjennings@uaex.edu
Jogan, Kathi Equine	479-575-6300 kjogan@uark.edu
Kegley, Beth Ruminant Nutrition	479-575-3050 ekegley@uark.edu
Kimbrough, Chelsey Specialty Livestock/Youth Edu.	501-671-2067 ckimbrough@uaex.edu
Kutz, Bryan Livestock Judging	479-575-4337 bkutz@uark.edu
Looney, Charles Reproduction	870-777-9702 clooney@uaex.edu
Maxwell, Charles Swine Nutrition	479-575-2111 cmaxwell@uark.edu
Philipp, Dirk Forage Nutrition	479-575-7914 dphilipp@uark.edu
Pohlman, Fred Meat Science	479-575-5634 fpohlma@uark.edu
Powell, Jeremy Veterinarian	479-575-5136 jerpow@uark.edu
Rorie, Rick Repro Physiology	479-575-6398 rorie@uark.edu
Rosenkrans, Charles Repro Physiology	479-575-4376 crosenkr@uark.edu
Russell, Mark Equine	501-671-2190 mrrussell@uaex.edu
Thomas, Lauren Animal Health	479-575-5917 lrf03@uark.edu
Ward, Heidi Veterinarian	501-671-2162 hward@uaex.edu
Yazwinski, Tom Parasitology	479-575-4398 yazwinsk@uark.edu
Zhao, Jiangchao Bacterial Immunology	479-575-6323 jzhao77@uark.edu

# ANSC

(animal science)

Spring / Summer 2019

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Department of Animal Science

Editors: Jamie Starks Newberry  
jstarks@uark.edu

&  
Bryan Rhodes  
bmrhodes@uark.edu  
<http://animal-science.uark.edu>



Animal Science - UA



## In the Loop



Michael Looper  
Department Head

Hello from your Department of Animal Science. As I write this column for the newsletter, many people are just now starting to recover from massive amounts of rain and river flooding. Our thoughts and prayers go out to all those affected. With floods impacting our state in 2015, 2016, and 2017, Animal Science faculty were quick to aid livestock and forage producers in recovery from the devastating impacts. Sincere appreciation is expressed to John Jennings, Shane Gadberry, Heidi Ward, and Kenny Simon for their much-needed and timely delivery of best management practices to those hardest hit.

As is normal, spring was a busy semester and summer is in full swing! Currently, a search committee is diligently working to fill the equine faculty position here in Fayetteville. Also, we welcome Bryan Rhodes to campus as an Administrative Specialist. The hallways of the Ag, Food and Life Sciences Building are filled with new students enrolling in classes for the fall semester, and scientific meetings are planned for June and July. Several graduate students have or will complete their program requirements this spring or summer. We wish them the very best in their future endeavors.

In April, the department held our annual Awards and Scholarship Banquet. Three alumni and one 'Friend' of the department were recognized for their outstanding contributions and achievements in the animal sciences. We also recognized scholarship winners (~\$40,000 awarded in scholarships), as well as undergraduate and graduate student awardees. Thanks to our many scholarship donors for making these financial awards possible. Please take a few minutes to read more about the banquet in the following pages. I want to thank Jamie Newberry and the REPS group again this year for coordinating and hosting the awards banquet. Congratulations to all awardees! This spring, 15 students were accepted into various veterinarian medicine schools; an 83% acceptance rate. Congratulations to these students, and I express my sincere gratitude to the Animal Science faculty for doing an outstanding job preparing

these young people.

The Pauline Whitaker Animal Science Arena hosted a variety of educational events this spring, including the Arkansas Beef Quiz Bowl, State FFA contests, Hog Wild FFA event, County Extension Agent In-Service Training, and Farm Friends experience. The Block and Bridle Club hosted the Razorback Classic and Cattle for a Cause dual ring show which raised \$8,935 for the Lane Medical Benefit Fund in Siloam Springs. Thanks to Beth Kegley and Janeal Yancey for their leadership of this event.

Since the beginning of the year, several faculty have been awarded grants totaling over \$1.06 million from various funding agencies including the Arkansas Biosciences Program, Arkansas Beef Council, University of Arkansas Chancellor's Innovation and Collaboration Fund, Southern Sustainable Agriculture Research and Education (SARE) program, and the USDA-NIFA. These funds will allow faculty to answer pertinent industry-related research questions that will enhance productivity and economic viability of Arkansas agriculture. These awards are a testament of the quality of research generated from Animal Science faculty.

I want to acknowledge Charles Looney at the Southwest Research and Extension Center (SWREC) in Hope. Charles hit the ground running last fall and hasn't looked up yet! He already has coordinated several high quality reproductive technology workshops for county faculty and beef producers. If you have questions regarding cattle reproduction, or just want to talk cattle, give Charles a call! He is a great resource to our animal science programs and the livestock industry.

Your support of the Department of Animal Science is appreciated. Please let us know if we can assist you. As always, feel free to contact me [looper@uark.edu; (479) 575-3745] or stop by and visit when you are in Fayetteville.

Michael Looper  
Department Head

4 Awards of Distinction

*The Department of Animal Science presented its 2019 Awards of Distinction during its annual Animal Science Awards and Scholarship Banquet.*

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Support Animal Science Department Scholarships

By buying a chairback in the Pauline Whitaker Animal Science Center

You can support scholarships for Department of Animal Science students and receive permanent recognition by purchasing a chairback in the Pauline Whitaker Animal Science Center. Purchases are tax deductible and can be made in the name of an individual, a business, or in honor or memory of a loved one or friend. If you are a former judging team member and would like to purchase a seat in honor of your judging team, contact Bryan

Kutz at 479-575-4337. Chairbacks are available for a minimum donation of \$500, although many individuals have donated more. If you would like to help with scholarships by purchasing a chairback, fill out the form to the right and mail it with a check made out to Agricultural Development Council, with a notation of Arena Chairback to the address on the form at the right.

Chairback Order Form

Please use separate page if needed.

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### Department Presents Awards of Distinction to Alumni and Friend

*The Department of Animal Science presented its 2019 Awards of Distinction during its annual Awards and Scholarship Banquet on April 23th at the Pauline Whitaker Animal Science Center.*

*Also honored at the banquet were students who received scholarships for the 2019-20 academic year. The department presented almost \$40,000 in scholarships to its students this year.*

*The banquet was hosted by the Animal Science REPS group, which, this year, consisted of Mersady Redding, Amy Frank, Annalee Parker, Colleen Williams, Elle Rottman, Kaylee Chambers, Sophia Mauldin, Bailey Carpenter, Holley Herndon, Shannon Leonard, Zoey Smith and Kelsey Johnson.*

*The 2019 Awards of Distinction recipients are: Advanced Graduates of Distinction – Nicole Huffer and James Caldwell; Graduate of Distinction – Kaaron Jody Davis; Friend of the Department – Linda Jones (posthumously). Each awardee was recognized for his or her contributions to animal science industry and research, as well as to the Department of Animal Science.*

**Nicole Huffer** grew up near the Atlantic Ocean in the rural area of Virginia Beach where she participated in her local 4-H Livestock Club, showed cattle, sheep, hogs, turkeys, and chickens, and began her passion for



Nicole Huffer

agriculture. In 2009, she earned her B.S. degree from Virginia Tech where she majored in animal and poultry sciences with a program focus in science and an emphasis in livestock.

Prior to graduating, Nicole interned for Murphy Brown, LLC (now Smithfield Foods) on a large farrow-to-finish hog operation where she gained production experience and discovered meat science as a career option. Nicole then went on to receive her M.S. degree in 2011 from the University of Arkansas in animal (meat) science under the direction of Dr. Jason Apple where she studied the effects of feeding beef tallow on quality characteristics of pork bellies from pigs fed DDGS and worked and resided on the university's swine research farm.

After graduation, Nicole relocated to Wichita, Kansas where she began her career

in Research and Development as a Food Scientist for Cargill. With over six years as a Food Scientist and Senior Food Scientist, Nicole worked in different capacities as a researcher in food safety for ground turkey and as a product developer and innovator of cooked meats and then of fresh value-added beef for Cargill's Foodservice and Retail customers. Since 2017, Nicole has worked as the Research and Development Innovation Manager for Cargill Protein North America where she leads the innovation strategy for cooked proteins into the Retail channel.

Nicole has a passion for developing high-performing R&D talent, for inclusion and diversity in the workplace, and for bettering her community. She sits on Cargill Protein Women's Leadership Council and United Way of the Plains Women United Steering Committee and was recently named a North American Meat Institute Leader of Tomorrow. Nicole is married to Nathan Huffer and they have a daughter, Evelyn, and are expecting their second child this spring.

**Dr. James Caldwell** received his B.S. in animal science from Morehead State University and a M.S. and Ph.D. in ruminant nutrition from the University of Arkansas. After completing his Ph.D., he worked as an Assistant Professor of Animal Science in the Department of Agriculture & Environmental Science at Lincoln University for four and a half years.

While at Lincoln University he taught animal nutrition and forage related courses, primarily Applied Nutrition, Ruminant Nutrition, and Pastures and Forages. His research primarily focused on ruminant nutrition and grazing systems dealing with both small and large ruminant animals. He has



James Caldwell

been the PI or Co-PI of several research projects funded by USDA, NIFA, and NRCS, and has numerous research articles published. After leaving Lincoln University, Dr. Caldwell worked for Purina Animal Nutrition for three and a half years where he led the R&D efforts for

the Companion Animal business unit.

Currently, Dr. Caldwell works for Delacon USA, a feed additive company based in Austria, where he supports field trials and research, leads ruminant sales and training programs, in addition to supporting product development in the USA and Canada. Furthermore, Dr. Caldwell has been a review author for the Journal of Animal Science, The Professional Animal Scientist, and Sheep and Goat Research Journal. He has also been an invited speaker at different conferences and was involved in national collaborative projects.

**Kaaron Jody Davis** grew up on a small farm south of Farmington, AR where she was reared to value all forms of education. Her father, Aaron Davis, raised and trained horses and mules as well as made and repaired western saddles and horse tack in his saddle shop. While he only had the opportunity for an eighth-grade education, he was self-educated and a true craftsman and businessman. In comparison, Jody's mother, Martha Davis, worked very hard to put herself through college, ultimately obtaining her Ph.D. She became a professor at the University of Arkansas where she taught a variety



Jody Davis

of communication-related classes and ultimately published her own textbook, "Scientific Papers and Presentations."

Upon graduation with her Bachelor of Science degree in animal science in 1991, Jody's job changed from part-time student worker to a full-time position. She assumed the duties of professional assistant to Dr. Duane Wolf and advisor for his undergraduate students. Over the next 20 years, Jody developed her understanding of the Dale Bumpers College of Agricultural, Food and Life Sciences' curriculum and advising needs. She now serves as Director of Advising and Student Records for the college and is responsible for overseeing the advising needs of the faculty and staff as well as monitoring the students' academic progress before ultimately approving them for graduation.

## Awards & Scholarship Banquet

Jody strives always to be of assistance to those around her. She has an open-door policy to encourage students to come see her when they need anything. Her friends and family also know they can ask her for help any time.

Regardless of whether it is cooking a meal for one or a group, moving someone into a new home, or working cows, Jody is willing to pitch in and help.

**Mrs. Linda Jones** began her Animal Science career at the abattoir before moving her position in to AFLS. As an Administrative Specialist, Linda went above and beyond to

help faculty, staff and students with all types of requests. Most days you could find Linda at her desk helping students with enrollments, forms or just being a listening ear when needed; helping faculty in numerous ways from grading to giving exams when necessary. Other days, Linda could be found out at the farms helping collect research sam-



Linda Jones

ples or data. It wasn't uncommon to meet Linda's husband, Loy, kids or grandchildren in the hall, stopping by to say hi or take her out to lunch. Most every day, people would find their way to her office for coffee and conversation, and the sound of laughter was often heard coming from the suite.

Linda made a lasting impression on the lives of those who spent any time with her, and she was always ready to help when needed. The department would like to present this award in Linda's memory in recognition of her unfailing support of this department, its faculty, staff, and students. }

## Outstanding Student Awards Presented to High Achievers

*Each year, Bumpers College asks the department to select an outstanding undergraduate, transfer, masters, and doctoral student. This year's outstanding graduates are: Doctoral – Eva Wray; Undergraduate – Bailey Carpenter; Transfer – Nathan Davis; Masters – Ruchita Uttarwar. The Paul R Noland Graduate Student Award is awarded to masters and doctoral students. It is named in honor of Dr. Paul Noland, a Department of Animal Science faculty member from 1951 until his retirement as department head in 1994. This year's Noland Award recipients are: Doctoral - Xiaofan Wang and Masters - Ruchita Uttarwar.*

**Eva Wray** has already earned two degrees from the University of Arkansas, both her B.S. and her M.S. are in animal science. She is currently in her final year of Ph.D. studies, and her research is focused on comparing cattle parasite identification techniques of traditional parasitology with molecular parasitology. During her studies, Eva has had the opportunity to work on many drug trials for various drug companies with both Drs. Yazwinski and Tucker using cattle and poultry. She often lectures and hosts workshops for local producers and extension agents over parasite controls of livestock; as well as talking to kids from various local schools and programs (K-12) about the importance of parasites.

**Bailey Carpenter**, a senior from Marine, Illinois received her undergraduate degree in animal science, with a minor in agricultural business. In the summer of 2016, Carpen-

ter carried out poultry research in Nampula, Mozambique, and continued her research in the summer of 2018, where she spent two months in Dangriga, Belize collecting data for her honors thesis, Observations and Applications of Husbandry Methodologies on a Backyard Poultry Farm in Dangriga, Belize.

During her undergraduate career, she has been a part of the animal science R.E.P.S; an executive member for Hogs for Hope, an organization on campus that benefits Arkansas Children's Northwest; an on-campus tutor for Class +; and has received her level I certification for inorganic and organic chemistry. The daughter of Jan and Mark Carpenter, she graduated summa cum laude this May, and was accepted into University of Pennsylvania's School of Veterinary Medicine for the Fall of 2019, where she plans to receive her DVM degree and Ph.D. in avian pathology.

**Nathan Davis** grew up on a family farm in southwest Oklahoma where they raise a few thousand acres of cotton, wheat, milo, and soybeans. Personally, he owns ten sows and raises show pigs for county and state fairs. Nathan is a current member of the livestock judging team, and hopes to graduate with his bachelors in animal science next spring. After college, he plans to return home and continue his show pig operation, and work in the animal nutrition field.

*The Paul R. Noland Graduate Student Award is given to the winner of an annual competition. The competition judges animal science graduate students*

*in three areas: abstract, oral presentation, and curriculum vitae.*

**Ruchita Uttarwar** is a graduate research student under the supervision of Dr. Jiangchao Zhao. She completed her veterinary and animal science study (B.V.Sc & A.H) from Nagpur Veterinary College at Maharashtra Animal & Fishery Science University in India. She feels that being able to heal the speechless through love and knowledge is the best thing one can do to give back to nature, which has been nurturing us since the very beginning. *Ruchita was awarded both the Department's Outstanding Masters Student and Paul Noland Masters student awards.*

**Xiaofan Wang** has been pursuing a doctoral degree in animal science at the University of Arkansas since 2015. She is co-directed by Drs. Maxwell and Zhao. Her academic background is in molecular biology, swine nutrition, gut microbiome and cultureomics. Her project is dedicated to improving swine postweaning gut health through establishing a "health" gut microbiome community. Her dissertation project, "longitudinal investigation of the swine gut microbiome from birth to market revealed stage associated microbiome," won the second place in the graduate poster competition at the AR-BIC #5 annual conference. The same project was recently accepted as a late-breaking poster for the 2019 American Society for Microbiology Conference in San Francisco and will be showcased in the main exhibit and poster hall. }

## Awards & Scholarship Banquet

### Almost \$40,000 Awarded to 2019-2020 Scholarship Recipients

*Scholarship recipients were selected by a committee of animal science faculty. Winners were chosen based on academic merit and departmental involvement.*

#### **Arkansas Meat Processors and Locker Association Heck Judging Scholarship**

Jeffrey Gage Dixon

#### **Arkansas Cattleman's Association Scholarship**

Jeffrey Gage Dixon

#### **Arkansas Beefmaster Scholarship**

Brady Rowland

#### **Arkansas State Farm Credit Scholarship**

Taylor Looper

#### **C.J. Brown Scholarship**

Anissa Edwards

#### **Robert Felsman Scholarship**

Emily Efrid

#### **Dr. Richard and Ann Fulton Scholarship**

Victoria Reid

#### **Hudson Family Scholarship**

Alexander Theodore

#### **Dr., Mrs. Paul Lewis Senior Scholarship**

Hayley Stanton, Kaitlyn Babb, Olivia Boshears, Christina Tarkington

#### **Danny Metz Scholarship**

Noah Black-Ocken

#### **Paul R. Noland Scholarship**

Hunter Usdrowski, Layken Rainbolt

#### **Nancy Jack Award for Equine Excellence**

Jordan Payton

#### **PLR Farms/JO, Marie Parker Scholarship**

Maryrose Warren

#### **Brangus Endowed Scholarship**

Emily Efrid

#### **A.L. Neumann Scholarship**

Mersady Redding, Abbigail Merrill, Jurnee Wilson, Devin Whiteside, Haley Maaz, Annalee Parker, Mikayla Mayfield, Arykah

Cotton, Analynn Newton, Shelby Horton, Madison Stamps, Eva Short, Alisun Watson, Emma Williams, Nicholas Valentini, Katheryn Reddin, Spencer Thrailkill, and Ian Gilbert

#### **Will, Frances Dorough Scholarship**

Mason Plunk

#### **Ned Ray Purtle Scholarship**

Alexa Wandrey

#### **Ned Ray Purtle Scholarship**

Mesa Kutz

#### **Dr. Calvin Willis Scholarship**

Ted Chambers

#### **William and Frances Dorough Scholarship**

Hailey Hilfiker

*To apply for a 2020-21 Department of Animal Science or Bumpers College scholarship, visit [animal-science.uark.edu](http://animal-science.uark.edu) or [bumperscollege.uark.edu](http://bumperscollege.uark.edu). Scholarship applications are open from Jan. 1- Feb. 15 every year. If you have any questions, please contact Heather Parks at [hyparks@uark.edu](mailto:hyparks@uark.edu). }*

### American Society of Animal Science Scholastic Achievement Awards

The American Society of Animal Science Scholastic Achievement Awards are presented to students who rank among the top 10% of the Department of Animal Science senior, junior, and sophomore classes.

The recipients must have the intention of pursuing a career in animal science. Those honored will have their names published in the *Journal of Animal Science*. This year's honorees were presented plaques at the banquet.

Seniors: Gabrielle Noel Abbott, Brianna Ellen Bolstad, Bailey Ann Carpenter, Kaylee Dawn Chambers, Hanna Marie Dickey, Ashley Ella Hanks, Kelsey L. John-

son, Brady E. Martin, Mersady C. Redding, and Elle Anna Therese Rottman

Juniors: Noah C. Black-Ocken, Ian McGregor Gilbert, Taulbee Brennan Guntner, April Louise Lasiter, Madison Paige Looper, Victoria Liung Reid, Hunter Mark Usdrowski, and Emma Marie Williams

Sophomores: Meredith Grace Halliburton, Lynsey Alexis McPherson, Analynn Marie Newton, Madison Rae Peltier, Shannon Elizabeth Rosing, Cailey Dawn Schmutz, Eva Caroline Short, and Devin Elaine Whiteside }



Sydney Harter presents an ASAS plaque to senior Elle Rottman.



## Animal Science Undergraduates Place First, Second in Competition

Animal science undergraduate students Sophia Landers and Erin Davis both presented their honors research thesis work at the American Society of Animal Science (ASAS) Southern Section meeting. The annual meeting was held in Oklahoma City January 27 – 29. ASAS invited both ladies to present their research in two formats. The first presentation was a single slide with a three-minute time limit, and the second presentation was a 12-minute presentation. Landers placed first and Davis placed second in a fantastic representation of a University of Arkansas, Department of Animal Science honors student.

Landers presented an abstract regarding research conducted to determine the efficacy of extended-release eprinomectin for the reduction of horn flies, face flies and fecal egg counts of parasitic nematodes in replacement beef heifers. “I was absolutely terrified,” Landers said. “Not about the competition, but more about sharing the information with my peers.” She had a lot of help in preparing for her presentation: Drs. Tom Yazwinski and Jeremy Powell (who make up her honors thesis committee); as well as Chris Tucker, program technician, and Eva Wray, Ph.D. candidate, helped. “They went out of their way to help with whatever I needed,” stated Landers. “They really helped me make scientific jargon sound like normal facts.” Her presentation comes after Landers

spent her summer collecting and analyzing samples from Dr. Yazwinski’s plots at the Division of Agriculture Physiology farm.

“Relationships among circulating prolactin concentrations, hair coat score, and weights of grazing cows,” is Davis’ honors



Sophia Landers

thesis she presented at the meeting. When Davis began trying to find a honors project, she was directed to Dr. Charles Rosenkrans

and got excited about what he had to offer. “I had Dr. Rosenkrans as a professor for Animal Physiology I, so it was really wonderful being able to work with him and reinforce what I learned in his course with some of the hormonal aspects of the research,” Davis explained. “One of the most incredible aspects of this experience has been how much I have been able to learn along the way.” She picked up many new lab techniques, and in writing her proposal did a substantial amount of reading and research which allowed her to understand much more of the science behind what is being studied.

“Competing in the ASAS competition really reinforced and highlighted that for me. I was so nervous about the question portion following my presentation, but as questions began being asked, I realized that I understand the project inside and out, which is a really incredible feeling,” she said.

Landers would encourage any of her fellow students to do undergraduate research. “Take a chance on something you know nothing about to learn something new. Don’t be intimidated, ask around and be interested in your research. Afterall, you are going to be spending a lot of hours working on it,” she said.

Landers is originally from Dallas, Texas, and Davis is from Sheridan, Arkansas. Both students plan to apply to veterinary school upon graduation from the U of A. }

## Several Departmental Research Labs get Equipment Upgrades

The department’s research labs are getting an upgrade. Several new pieces of equipment have found their way to our labs in recent months.

First, the department has replaced an autoclave that had been used since the 1950s after it was deemed unsafe to be used. The new autoclave will be used to sterilize equipment and media for use in research programs. In addition, all biological waste generated by research projects must be autoclaved before it is disposed of. Most faculty in the department will use the autoclave; funds to purchase this new equipment were provided by the Agricultural Experiment Station, the Honors College, the Department of Animal Science, and individual faculty members.

Also new to our labs, is a Beckman Coulter CytoFLEX Flow Cytometer. Funded jointly by the Division of Agriculture, the

Department of Animal Science, and individual faculty, this system is capable of analyzing thousands of cells in a few seconds. Flow cytometry uses fluorescent probes alone or in conjunction with antibodies to detect and characterize cell populations. It is an instrument that is used across multiple areas of research in various ways including: reproduction, microbiology and immunology and hematology. In reproduction, it can be used to determine the percentage of viable and non-viable sperm, oxidative stress, abnormal DNA content, acrosome and sperm membrane integrity, and mitochondrial function. These sperm viability tests are applicable to all mammals. It can identify and quantify different blood cell populations in an immunology and hematology study.

Lastly, through a collaboration of the office of the University of Arkansas Vice

Chancellor for Research, the Agricultural Experiment Station, the departments of Poultry Science and Animal Science, and several individual faculty members, funds have been raised to purchase a new Gamma Counter that will remain housed in the department. (For several years, the only Gamma Counter on the Fayetteville campus has been housed in Animal Science.) It will primarily be used to read radioimmunoassays, which are sensitive methods of analyzing hormones and other biological metabolites. Dr. Charles Looney intends to be the most frequent user of this instrument from the Department of Animal Science, analyzing cattle serum for reproductive hormones. Drs. Jeremy Powell and Beth Kegley will also use it to measure testosterone, cortisol, and insulin concentrations in cattle on various research projects. }



# Animal Science Hosts the 2019 Arkansas State Beef Quiz Bowl

The University of Arkansas Department of Animal Science hosted the annual state-wide Beef Quiz Bowl this year in Fayetteville at the Pauline Whitaker Animal Science Center on Feb. 22. This program is funded by the Arkansas Beef Council through revenue collected from the Beef Check-Off. This UA Cooperative Extension Service activity provides students in Arkansas an incentive to learn more about management, food safety, forage nutrition, quality assurance, and end beef products. Educational material was provided for county extension agents and vocational agriculture instructors to further the learning process beyond that of their beef 4-H and FFA projects.

Students were tested on many levels of question difficulty. The questions were compiled by the Animal Science faculty and covered all aspects of beef production. Teams were comprised of four students who competed in a double-elimination tournament.

Twenty-one teams, 84 students, plus 4-H agents, Ag instructors and parents attended this event. Preparation for this contest allowed students to sharpen their knowledge



First place finishers, the Washington County 4-H "Beef Masters."

about beef cattle production. Additionally, students improved communication, goal setting, critical thinking, team building skills and ultimately enhanced their interest in beef cattle. This program has a great impact on educating students and encouraging a broadened perspective about their role in beef production, food safety and consumer acceptance. These efforts will be continued through the

University of Arkansas Animal Science, Cooperative Extension Service, Arkansas Beef Council and agriculture teachers across the state. Congratulations to the Washington County 4-H "Beef Masters" (pictured) for winning 1st, and to the Washington County 4-H "The Bull Pen" who won 2nd place. Salem FFA from Fulton County took home the 3rd place trophy. }

## Block and Bridle's Razorback Classic

The Block and Bridle Club's Razorback Classic and Cattle for a Cause Calf Shows were held on Saturday April 6 at the Washington County Fairgrounds.

There were 41 exhibitors participating, showing 65 head of cattle. Heifers, steers, and bulls were exhibited. The Razorback Classic is a jackpot ring – this year \$1,890 was returned to the exhibitors as prize money.

This year, the philanthropy receiving the proceeds from the Cattle for a Cause Show was the Lane Medical Benefit Fund in Siloam Springs. Donations obtained by club members before the show, and on-site donations from the cattle showing community (including much of the prize money handed out in the Razorback Classic) resulted in \$8,935 being contributed to this fund.

The club thanks all who donated and participated in this annual event. }

## 4-H Livestock Leadership Academy

The 2019 Arkansas 4-H Livestock Leadership Academy was held March 21-23 at the Arkansas 4-H Center in Ferndale. Forty 4-H members from across the state spent three days learning leadership skills and touring farms.

Day one consisted of the group doing the low ropes course with the ExCEL program and Minute to Win It team challenges.

Day two consisted of farm tours in north central Arkansas, beginning with Clover Leaf Farm in El Paso where they maintain a flock of 60 white-headed Dorper sheep. Stop number two was Chimney Rock Cattle Company in Concord, where they learned about the history and technologies being used on the Brangus operation. The tours end-



Forty 4-H members participated in the academy.

ed at the Cleveland County Livestock Auction, where Luke Mobley talked about the Arkansas Bull Sale and its origin. While there, the group heard various cattlemen talk about their operations and were able to walk through the pens to see bulls offered in the sale. The academy finished day three with reflections and evaluations. }

### A Day at the Races Provides Vital Experiences

An early Saturday morning alarm was well worth it for a group of students in the Department of Animal Science Thoroughbred class, who traveled to Hot Springs for a day of equine experiences.

The first stop on the way into town was Lake Hamilton Equine where they got to visit with Dr. Jesse Clement, a veterinarian in Hot Springs. While there observing, the students had a chance to see Dr. Clement diagnose a breathing problem, x-ray a foal, and ultrasound mares.

The big experience of the weekend, however, was at Oaklawn Park, where the students were guests of the park and had a race named after them. Following their namesake race, the group presented the owners with the trophy and posed for pictures with the winner in the winner's circle. In a surprising turn of events, the owners gave the trophy back to the group to keep and it is now at home in the department's display case. "It's one thing to go to

the races as an everyday observer, it's another thing to get to experience the ins and outs of the backside. I'm so proud to be part of a university that indulges its students varying interests," said animal science student Morgan Bonee.

The following morning, the group ate breakfast at the track kitchen and watched the horses train on the track. The day provided opportunities not many get to experience, including going into the jockey's room to learn about all of the different silks; how jockeys prepare for the races; and holding saddles to see how light they felt.

A trip to the clockers stand on the fifth floor of Oaklawn Park awarded the group a birdseye view, plus the chance to talk to professional clockers. Finally, it was on to the track itself where an assistant starter explained how the starting gate works and they were given a front row seat to watching the horses break out of the gates. }

### Kegley, Zhao Awarded Animal Health Grants

Drs. Beth Kegley and Jiangchao Zhao were each awarded \$15,000 to conduct animal health related research.

Kegley's research will focus on, 'determining nasal, oral and ocular bacterial community relationships with infectious keratoconjunctivitis cattle (more commonly known as pinkeye),' while Zhao's research will, 'identify bovine respiratory microbiome biomarkers for the onset of bovine respiratory diseases (BRD).'

USDA animal health funds are awarded on a competitive basis to agricultural experiment station faculty with an approved animal health CRIS project. Animal health funds are based in part on an institution's level of animal health-related grant activity and the number of applicable animal health projects reported to the USDA. These funds will be used to simulate development of external competitive funding. }

### New Interession Course Looks at Agricultural Practices in Panama

A new course, "Comparative Studies in Panamanian and US Agriculture," was offered this past spring and included a trip to Panama over spring break. Twenty-one students participated in the trip and were able to visit a number of farms, learn how the farmers operate, and see the challenges they face.

During their visit, students were exposed to a great diversity in agricultural practice. They toured a large pineapple plantation where they saw the entire production process, and students sampled pineapple that is among the highest in sugar content in the world. Students also went to an innovative, organic poultry operation where they ate Sancocho, Panama's national soup, then visited two grade-A dairy farms and a large orchid collection.

Other tours included a large beef operation where students learned how imported cattle from Nicaragua caused a severe price decline for local cattle. While at the beef operation, students drank from fresh-picked coconuts. Students also visited a renowned Thoroughbred horse farm where they learned of their breeding and training programs, toured pastures with brood mares and young foals, and toured facilities that easily rivaled those found in Kentucky farms.

One of the highlights for many of the students was a tour of a small coffee planta-

tion where they learned about normal coffee production, fair-trade, and value-added marketing. The group also toured a small fruit and medicinal garden where the owner processes jams and jellies for shipment around the world and then participated in a service-learning project at a local grade school.

The trip would not have been complete without touring the Panama Canal and the UNESCO World Heritage Site, Casco Viejo,



Students in Panama.

old city. Students boarded a small tour boat for a trip up the canal for lunch, followed by trips around a number of small islands to look for wildlife. The remainder of the evening was spent touring the Panama Canal Museum, while the final day consisted of a boat ride down the Panama Canal, going through the locks, and ending the tour on the Pacific Ocean.

While the majority of the 21 participants

were animal science majors, the group also featured a number of students from different fields of study. The class and trip were organized and developed by Dr. Kathi Jogan, and she and Dr. Ken Coffey traveled with the students. Plans are to make the class a permanent spring semester offering. }

### Two Department Members Receive Awards

Connie Stewart and Dr. Chelsey Kimbrough were the recipients of two prestigious awards in recent months, and were each honored at separate events.

Connie Stewart was selected as the 2018 awardee of the Division of Agriculture Non-Classified Support Personnel award. She was honored at a luncheon in Ferndale, and has provided 21 years of dedicated service to the University of Arkansas, Division of Agriculture, and the Department of Animal Science.

Dr. Chelsey Kimbrough received the Extension Excellence Award for Early Career - State Faculty, as well as serving as a member of the the group that won the Extension Excellence Award - State Team. These awards were presented during the Cooperative Extension Service State Faculty Conference in Little Rock. }

# Alumni News

## Davis Appointed to Arkansas Livestock and Poultry Commission

Tyler Davis, a 2006 animal science graduate, and a Market President for Diamond Bank in Ashdown has been appointed to the Arkansas Agriculture Department's Livestock and Poultry Commission Board for a seven-year term by Governor, Asa Hutchinson.

Davis, a sixth-generation farmer who has a hand in several areas of agriculture including cattle, row crops, poultry, and show pigs says that he is humbled and honored to be appointed to this position of extreme importance and will bring his talents to the commission's board.

"I will come to the table with an open mind, common sense, and will remain fair and impartial," said Davis. "I am ready to get

to work and help to sustain and improve livestock and poultry in Arkansas."

He sees the work that the commission does as vital to the people of Arkansas and wants to make sure that his children see exactly how important that work is. "My hope is that my children and their generation won't have to deal with the hardships we faced because the commission has got us to the point of disease eradication and overall success," Davis said. }



Tyler Davis

## Dahlem Crowned Miss Arkansas

Darynne Dahlem of Greenwood was crowned Miss Arkansas at the Robinson Center in Little Rock in June.

She is a Cum Laude Honors Graduate with a degree in animal science. During the competition week, she was awarded the Overall Medical School Marketplace Interview award. Dahlem plans on attending medical school in the future.

Darynne will compete in the Miss America pageant in September. }



Darynne Dahlem



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of Agricultural, Food  
and Life Sciences  
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In small and big ways, your gifts change lives. Increasing private gift support is critical to moving the University of Arkansas and the state of Arkansas forward. If you would like to join other alumni and friends to support the Department of Animal Science at the University of Arkansas, contact: **Mark Wilton, Development Office, Bumpers College, E-108 AFLS, University of Arkansas, Fayetteville, AR 72701, 479.575.2270 or email: [wilton@uark.edu](mailto:wilton@uark.edu)**

## Tell us about yourself!

You can also submit online under the Alumni tab at [Animal-Science.uark.edu](http://Animal-Science.uark.edu)!

We would like to hear how and what you're doing. Please use this form to provide information about yourself that you would like to see in the Alumni news section of a future Animal Science Newsletter. Also, please let us know if you would like more information about the Animal Science Alumni Society.

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# Dr. Jogan Honored with Service Learning Teaching Award

Kathi Jogan was named the recipient of the 2018-2019 Outstanding Contribution to Service Learning Teaching Award. The Service Learning Initiative Committee recognized the extraordinary commitment and accomplishments of Jogan through her service learning course, Equine Assisted Activities and Therapy (EAAT).

At the award ceremony on Jan. 28, Dr. Deacue Fields, Dean of the Dale Bumpers College of Agricultural, Food and Life Sciences, echoed comments by faculty and staff in Bumpers College, and stated that Jogan is an “extremely hard worker,” “always student focused,” and “always seeking ways to improve.” He added that Jogan is constantly making sure that her students have great experiences. Ken Coffey, professor and undergraduate program coordinator in the Department of Animal Science, added “amazing” to the list of ways to describe Dr. Jogan. He recalled recommending Jogan’s course to his advisee last year, and at the end of the semester, she wrote a note to him expressing how Jogan’s class had opened up her mind



Dr. Jogan (middle) is joined by Dr. Ken Coffey, Professor, Animal Science (left) and Dr. Deacue Fields, Dean, Bumpers College of Agricultural, Food and Life Sciences (right) as she is presented the Service Learning Award.

and changed her life.

For her EAAT course, she has partnered with local non-profit EAAT agencies where students can learn and apply their newfound skills. By integrating service learning into her course, Jogan not only demonstrates how behavioral health for individuals with emotional and physical disabilities could be promoted through horse therapy but also helps build

students’ character through volunteerism and meaningful community service. }

*The Service Learning Initiative is a joint initiative of the University of Arkansas Provost Office and the Honors College with the purpose of formalizing and expanding service learning opportunities on campus. Since 2014, when the Initiative was launched, more than 150 courses have been designated as service learning. }*

## Jennings Speaks at NCBA Cattlemen’s College

Dr. John Jennings spoke at the NCBA’s 26th Annual Cattlemen’s College in New Orleans. Dr. Jennings, along with Dr. Kim Mullenix from Auburn



John Jennings

University, provided an overview of bermudagrass and bahiagrass-based forage systems used in the southeastern U.S., including a review of the recommended yields and potential stocking rate and animal performance expectations during the summer

months.

Cattlemen throughout the United States know Cattlemen’s College for its stimulating and thought-provoking sessions that help generate higher returns for their operations. }

## Departmental Faculty Receive Research Funding

Dr. Jeremy Powell and faculty from the Department of Chemical Engineering, Drs. Jorge Almodovar and Lauren Greenlee, received \$119,268 from the University of Arkansas Chancellor’s Innovation and Collaboration Fund. They will investigate “Innovation in Livestock Pain Management: A Biopolymer Microneedle Patch for Transdermal Drug Delivery.” The research activities will study a proof-of-concept demonstration for development of a transdermal analgesic patch to help control pain management for post-surgical procedures in cattle. The potential technology could impact the industry by providing a useful management tool that would aid with long-term pain mitigation following surgical procedures.

The Southern Sustainable Agriculture Research and Education (SARE) program

awarded: Dr. Dirk Philipp, along with USDA-ARS scientist, Dr. Christine Nieman, \$251,321 to evaluate forage establishment and management in Arkansas’ silvopastures for small beef producers. Close cooperation will also occur with Heifer International and private landowners.

Drs. Ken Coffey and Mike Popp (Ag Economics faculty), along with USDA-ARS scientists, \$294,498 to investigate “Innovative nutrient management options for sustainable pasture land intensification.” The focuses are to evaluate the production and economic benefits of 1) using a subsurfer (applies poultry litter under the soil) in pasture settings, and 2) planting higher quality forages into existing bermudagrass pastures to improve growth rates of stocker cattle. }

## Department Welcomes New Faculty Member to SWREC

We would like to welcome Dr. Charles Looney to the Animal Science faculty. Dr. Looney is a Professor stationed in Hope at the Southwest Arkansas Research and Extension Center. His specialty is cattle repro-

duction. He started in October and has been going non-stop having already coordinated several high quality reproductive technology workshops for county faculty and beef producers. }



ANSC  
{animal science}

Newsletter Editor  
Department of Animal Science  
University of Arkansas  
AFLS B-114  
Fayetteville, Arkansas 72701

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